

**12th WORKSHOP: NON-COMMUTATIVE HARMONIC ANALYSIS,  
16 - 22.08.2009, Będlewo, Poland**

**Sunday, August 16**

19:00 **Dinner**

**Monday, August 17**

08:00–09:00 **Breakfast**

09:00–09:40 **Takeshi Hirai (Kyoto)**  
Projective representations and spin characters of finite and infinite complex reflection groups.

09:45–10:25 **Alexandru Nica (Waterloo)**  
Infinitesimal non-crossing cumulants and free probability of type B.

10:25–10:50 **Coffee break**

10:50–11:30 **Noriyosi Sakuma (Yokohama)**  
 $\boxplus$ -Infinite Divisibility of Free Multiplicative Convolutions with Wigner and Symmetric Arcsin Measures.

11:35–12:15 **Marcin Marciniak (Gdańsk)**  
On the structure of positive maps.

12:20–12:40 **Łukasz Wojakowski (Wrocław)**  
Conditionally free semi-stable distributions.

12:45–13:25 **Jiun-Chau Wang (Kingston)**  
New features of free central limit theorem.

13:30–14:30 **Lunch**

16:00–16:45 **Coffee and cakes**

19:00–20:00 **Dinner**

20:00–21:00 **Baby Talk – Yasuyuki Kawahigashi**  
Subfactors and representation theory for von Neumann algebras.

<b>Tuesday,</b>	<b>August 18</b>
08:00–09:00	<b>Breakfast</b>
09:00–09:40	<b>Gilles Pisier (Paris 6)</b> Remarks on Non-commutative Khintchine inequalities.
09:45–10:25	<b>Michael Anshelevich (Texas A&amp;M)</b> Characterizations of free Meixner distributions.
10:25–10:50	<b>Coffee break</b>
10:50–11:30	<b>Eugene Lytvynov (Swansea)</b> Meixner class of non-commutative generalized stochastic processes with freely independent values.
11:35–12:15	<b>Marie Choda (Osaka Kyoiku)</b> Fourier expansions and inner conjugacy class of subfactors.
12:20–12:40	<b>Adam Paszkiewicz (Łódź)</b> On notion of sufficiency in quantum statistics.
12:40–13:00	<b>Helene Airault (Insset-LAMFA)</b> Invariant measures, unitarizing measures, the example of the Poincaré disk.
13:00–14:00	<b>Lunch</b>
15:00–15:25	<b>Maciej Burnecki (Wrocław)</b> Noncommutative analogs of symmetric polynomials.
15:30–15:55	<b>Franciszek Hugon Szafraniec (Kraków)</b> The quantum harmonic oscillator in $\ell^2$ .
16:00–16:30	<b>Coffee break</b>
16:30–16:55	<b>Dorota Kępa (Lublin)</b> Statistics of animals on unbounded irregular graphs.
17:00–17:25	<b>Nobuhiro Asai (Aichi)</b> Probability Measures on $\mathbb{C}$ Associated with the Jacobi-Szegő Parameters of Orthogonal Polynomials.
17:30–17:55	<b>Uwe Franz (Besançon)</b> Characterisations of Idempotent States on Quantum Groups.
18:00–18:25	<b>P. K. Das (Kolkata)</b> Interaction of a three-level atom with a single-mode field in a two photon resonant cavity.
19:30	<b>Banquet</b>

**Wednesday, August 19**

08:00–09:00 **Breakfast**

09:00–09:40 **Luigi Accardi (Roma)**  
Renormalization and central extensions of Lie algebras.

09:45–10:25 **Teodor Banica (Toulouse)**  
The row algebra of a free quantum group.

10:25–10:30 **Picture**

10:30–10:50 **Coffee break**

10:50–11:30 **Bogusław Zegarliński (CNRS)**  
Ergodicity of Markov semigroups in infinite dimensions.

11:35–12:15 **Stanisław Woronowicz (Warszawa)**  
Quantum  $SL(2, \mathbb{R})$ -group.

12:20–12:40 **Melanie Hinz (Wrocław)**  
Multiplicative square of the free Poisson measure.

12:40–13:00 **Wojtek Młotkowski (Wrocław)**  
Generalized Poisson measures.

13:00–13:45 **Lunch**

14:00 **Excursion to Uzarzewo and Szreniawa**

19:00–20:00 **Dinner**

20:00–21:00 **Baby Talk – Nobuaki Obata**  
Quantum White Noise Calculus – Quantum White Noise Derivatives and Applications.

**Thursday, August 20**

08:00–09:00 **Breakfast**

09:00–09:40 **Yasuyuki Kawahigashi (Tokyo)**  
Superconformal field theory, Moonshine and operator algebras.

09:45–10:25 **Claudia Pinzari (Roma)**  
A theory of induction for tensor  $C^*$ -categories.

10:25–10:50 **Coffee break**

10:50–11:30 **Franz Lehner (Graz)**  
Free infinite divisibility of the normal distribution.

11:35–12:15 **Louis Labuschagne (UNISA)**  
Maps on noncommutative Orlicz spaces - joint work with W. A. Majewski.

12:20–12:40 **Hiroaki Yoshida (Tokyo)**  
Linked partitions and deformed Meixner laws.

12:45–13:25 **Steve Curran (Berkeley)**  
De Finetti theorems for easy quantum groups (joint work with T. Banica and R. Speicher).

13:30–14:30 **Lunch**

16:00–16:30 **Coffee and cakes**

16:30–16:55 **Jolanta Misiewicz (Zielona Góra)**  
Generalized convolutions.

17:00–17:25 **Hyun Jae Yoo (Hankyong)**  
Determinantal Point Processes: Their Gibbsianness and Dynamics.

19:00 **Barbecue**

**Friday, August 21**

08:00–09:00 **Breakfast**

09:00–09:40 **Fumio Hiai (Tohoku)**  
Riemannian metrics on positive definite matrices related to means (joint work with D. Petz).

09:45–10:25 **Hun Hee Lee (Chungbuk)**  
 $q$ -Chaos

10:25–10:50 **Coffee break**

10:50–11:30 **Karol Życzkowski (Kraków)**  
On complex Hadamard matrices and their applications.

11:35–12:15 **Alexander Tikhomirov (Bielefeld & Syktyvkar)**  
Circular law for random matrices.

12:20–12:40 **Aurel Stan (Ohio)**  
Two dimensional non-commutative random vectors in terms of APC operators.

12:45–13:05 **Reiji Tomatsu (Tokyo)**  
Classification of actions of a discrete amenable Kac algebra on amenable von Neumann factors.

13:05–13:25 **Takahiro Hasebe (Kyoto)**  
Time-independent properties of monotone convolution semigroups.

13:30–14:30 **Lunch**

16:00–16:45 **Coffee and cakes**

19:00–20:00 **Dinner**

**Saturday, August 22****08:00–09:00 Breakfast****09:00–09:40 Robin Hudson (Loughborough)**  
Unitary causal and double products in non-Fock quantum stochastic calculus.**09:45–10:25 Viacheslav Belavkin (Nottingham)**  
Fock modules of Krein  $L$ -modules, affine  $*$ -algebras and harmonic analysis of quantum Levy–Brownian motion.**10:25–10:50 Coffee break****10:50–11:30 Un Cig Ji (Chungbuk)**  
Transformations on Boson Fock Space.**11:35–11:55 Michał Adamczyk (Łódź)**  
On analysis of quantum states by generalized quantum measurement.**12:00–13:00 Lunch**